**CS651, Web Systems  
Exercise using Software as a Service: Google Cloud Vision API**

**Group 5** –

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**GitHub Repo with Wiki**: <https://github.com/nithishkumar16/SAAS-Application-Google-Vision-API-GCP/wiki>

**Application URL**: <https://saas-assignment-439507.uc.r.appspot.com/>

**Source code:**

**Server.js (Node.js + Express):**

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**Form (index.html):**

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**Deploying app to google app engine (gcloud app deply):**

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**Google vision API:**

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**Displaying Google Vision API Detected Labels on form:**

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**Output:**

**Form Display:**

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**Form Output with Image preview:**

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**Google Cloud Platform (App Engine Dashboard):**

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**Explanation of Code:**

1. Set up the Node.js project by creating a directory, initializing it, and installing the necessary dependencies for Express, Multer, and Google Cloud Vision API.
2. Write the backend code to handle image uploads, process images with the Google Cloud Vision API, and return detected labels as a response.
3. Create a frontend with an HTML form for image uploads and JavaScript to display the detected labels.
4. Configure Google App Engine by creating an app.yaml file to specify the runtime and deployment settings.
5. Deploy to Google App Engine using the Google Cloud SDK and access the live application via the provided URL.

**State of system**: Fully Working